




# MEMORANDUM

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**DATE:** February 15, 2005

**TO:** Members of the Mayor and Council  
Downtown and Rio Nuevo Subcommittee

**FROM:**   
Karen Thoreson  
Assistant City Manager

**SUBJECT:** I-10 Mainline Widening

Jim Glock, Director of Transportation, will be present at today's Mayor and Council Downtown and Rio Nuevo Subcommittee meeting to answer any questions regarding the above subject.


KT:hy

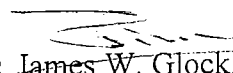
Attachment: Memorandum dated February 4, 2005



# MEMORANDUM

DATE: February 4, 2005

TO:  Michael D. Letcher  
City Manager

FROM:  James W. Glock, Director  
Department of Transportation

SUBJECT: **I-10 Mainline Widening – Public Safety Access Issues**

On February 3, 2005 I attended a briefing at the Arizona Department of Transportation (ADOT) District Office on the Interstate 10 widening project. Assistant Tucson Fire Chief Dan Larkin and Steve Pageau and Richard Nassi from the Tucson Department of Transportation were also present at this meeting. During the course of that briefing three issues were raised regarding emergency services access and the means to address those issues were identified.

## **Emergency Access Along Frontage Roads**

Concerns have been raised regarding emergency vehicle access and priority along the frontage road during construction. In particular is the issue of whether an emergency vehicle will be able to have a clear travel path along the frontage road during congested periods of the day.

ADOT District Engineer, Dennis Alvarez, explained that the frontage roads would be striped to accommodate three travel lanes, plus a 7- to 8-foot shoulder/breakdown lane. This lane configuration will provide sufficient room for traffic to move to the right and allow passage of emergency vehicles on the left during periods of heavy traffic.

## **Emergency Access Along Mainline**

Concerns have been raised regarding the need for emergency vehicle access along the main line through a portion of the interstate between the proposed 29<sup>th</sup> and Prince Road on and off ramps.

Mr. Alvarez explained that when on and off ramps are closed to mainline traffic, this will occur in such a fashion that the barriers preventing the ramps' use would be easily removed and provide the needed access. Along the majority of the main line through lanes, concrete barriers will be in place to separate traffic and define the edge of the roadway. Lightweight plastic barriers will be used at on and off ramp locations instead of concrete, allowing for their easy removal during emergencies.

## **Emergency Access to the Mainline**

One final concern relates to access to the mainline freeway should an emergency occur. Despite the emergency access proposal noted above, there is the need to be able to access the mainline from the side of the mainline reconstruction where work is actually occurring.

In this instance, Mr. Alvarez commented that access would be available through those same access points needed for construction operations. Such points will vary as construction proceeds; therefore public safety agencies will need to be kept abreast of changing conditions. In this case, a well-established procedure involving what is known as "Transportation System Management"

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RE: I-10 Widening – Public Safety Access Issues  
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(TSM) meetings will be used to keep the most up-to-date information flowing to the appropriate agencies. ADOT (and TDOT on certain projects) has successfully used TSM meetings to make sure agencies, businesses, neighbors, media and the public at large are informed of the impacts a particular improvement project will have during a specified period of time.

### **Incident Monitoring**

ADOT is also planning to have closed circuit television cameras in place along the corridor. They will be monitored locally 18 hours per day by staff looking for critical traffic situations and incidents where emergency response vehicles or roadside assistance, such as tow trucks, can be dispatched to remedy the situation. ADOT's Phoenix traffic operations center staff will monitor the remaining 6 hours of the day. Those staffing the system will be able to contact local media outlets and utilize variable message signs along I-10 to communicate varying roadway conditions to the traveling public.

### **Travel Reduction**

At the urging of the Tucson Department of Transportation and the Pima Association of Governments, ADOT is exploring the possibility of funding express transit service along the I-10 corridor during construction. This has the potential of helping reduce the traffic impact of the project by reducing the number of vehicles during peak hours.

In summary, it appears that the issues being raised are resolvable with continued vigilance. There is no doubt that other issues will surface. My staff, along with the ADOT team as well as all the other stakeholders in this large and critical project will continue to make every effort to minimize the impact of this overall effort. The hard fact remains; the interstate needs to be widened to accommodate growing travel. The longer we wait to make the needed improvements, the more difficult it will become to make them when we do.

Attached please find informational material prepared by ADOT to date. Should you have any questions or concerns, please do not hesitate to contact me at 4371.

JWG:mc

Attachments

c: Benny Young, Assistant City Manager  
Liz Miller, Assistant City Manager  
Karen Thoreson, Assistant City Manager  
Todd Sander Chief Information Officer  
Chief Dan Newburn, Tucson Fire Department  
Assistant Chief, Dan Larkin, Tucson Fire Department  
Chief Richard Miranda, Tucson Police Department  
Steve Pageau, Deputy Director, Department of Transportation  
Richard Nassi, Administrator, Traffic Engineering Division  
Andy Dinauer, Administrator, Engineering Division  
Michael Graham, TDOT Public Information Officer

## **I-10 Widening Meeting Alert January – February 2005**

### **January 28 – Emergency Service, Government, Business, Residents**

(stakeholder groups represented)

9:30 a.m. – 11 a.m.

Traffic System Management Meeting with the City of Tucson and Rio Nuevo to discuss citywide projects and coordinate efforts with emergency services

Rio Nuevo Office – 52 W. Congress

### **January 31 – Government**

2 p.m.

Meeting with the Governor's office to provide update on I-10 Widening and status of communication with emergency services

Governor's Southern Arizona Office – 400 W. Congress

### **February 1 – Emergency Service**

3:30 p.m.

Meeting with Carondolet Representative Jannie Cox

120 N. Tucson Blvd.

### **February 4 – Government**

9 a.m.

Meeting with local legislators to discuss I-10 Widening

Southern Legislative Office – 400 W. Congress

### **February 4 – Emergency Service**

11:30 a.m.

Meeting with University Medical Center representative Eileen Whalen

1501 N. Campbell Ave.

### **February 4 – Emergency Service**

3:30 p.m.

Meeting with Tucson Medical Center Representative Jack Jewett

5301 E. Grant Road

Sedona Room

### **February 10 – Government**

6:30 p.m.

Meeting with Pima County officials to discuss I-10 Widening and Silverbell Road

El Rio Neighborhood Center

### **February 14 – Emergency Service**

2 – 4 p.m.

I-10 TSM Meeting with emergency service providers

Sentinel Building, Rillito/Sabino Rooms – 320 N. Commerce Park Loop

**February 15 – Business**

11:50 a.m. – 12:15 p.m.

Presentation to the Tucson Downtown Alliance Board

Rio Nuevo Office – 52 W. Congress

**Pending Meetings****Emergency Services**

Tucson Medical Center

Arizona Health Sciences Center

University Medical Center

**Business/Government**

Tucson Metropolitan Chamber of Commerce Transportation Committee

Tucson Mayor and Council

Pima County Board of Supervisors

**Team Meetings**

February 3, 2005

10 a.m. - 12 p.m.

Traffic Model Review

ADOT Tucson District Office – 633 E. 22<sup>nd</sup> Street

February 3, 2005

1 p.m.

TSM Planning Meeting with ADOT and design consultants to prepare for February 14 meeting

ADOT Tucson District Office – 633 E. 22<sup>nd</sup> Street

February 16

10 – 11:30 a.m.

Monthly I-10 Progress Meeting

Sentinel Building, Rillito/Sabino Rooms – 320 N. Commerce Park Loop

## **Widening I-10: Prince Road to 29<sup>th</sup> Street Briefing Paper**

### **Project Description**

Interstate 10 between Prince Road and 29<sup>th</sup> Street (approximately 5 miles) in Tucson will be widened from six to eight lanes during a 40-month construction period. The project to reconstruct I-10 will cost \$122 million. Project advertisement will commence by February 2006 and construction is scheduled to begin late Spring/early Summer 2006.

### **Project Benefits**

- Widen freeway from six to eight lanes.
- Build six new interstate bridges wide enough to accommodate future City of Tucson arterial street expansion.
- Combine three separate projects into one to reduce construction time from 10 years to 3 1/2 years.
- Construct the project in one stage – instead of the original plan that separated construction into three stages - in order to reduce the closure of major arterial cross streets.

### **Traffic Mitigation**

- Only allow complete closures on cross roads for bridge structure removal and limit complete cross road closures to weekends. Cross road closures will occur at Grant, Speedway, St. Mary's, Congress, Granada and 22<sup>nd</sup> Street.
- Fund express bus service from Marana area to high employment centers.
- Remove stop and yield signs and synchronize all traffic lights to increase capacity at frontage roads and reduce potential delays.
- Utilize traffic modeling to predict traffic patterns and although it is not an exact science, modeling generally reflects future traffic conditions and demonstrates how traffic will move during the construction process.
- PAG and City of Tucson have publicly endorsed the project.
- Utilize ten lanes for traffic (three frontage road lanes in each direction and two freeway lanes in each direction) instead of the current six freeway lanes.
- Minimize neighborhood cut through traffic by providing three lanes of frontage roads.
- Work with Tucson Unified School District to bus students that would cross the frontage roads.

### **Emergency Services**

- Provide ramps on both sides so that only emergency vehicles can enter or exit the project area.
- Staff a "Mini" Traffic Operations Center (TOC) with a minimum of two people for 18 hours a day to provide regular traffic updates, post traffic messages on variable messaging boards, notify law enforcement and emergency response personnel of closures and/or traffic accidents, and

communicate with MetroNetworks a service that disseminates information to radio stations.

- Provide constant camera monitoring throughout the entire project.
- Regularly communicate and coordinate closures and construction impacts with the emergency response industry to minimize impacts to emergency services.
- Follow the model created during the construction of the I-10 / I-19 interchange and provide on site tow trucks to facilitate accident removal.
- Work with emergency services industry, City of Tucson and community members to create a signage plan for access to emergency services.

### **Consequences Under Original Concept**

- Requires closing cross streets during construction. Received opposition from the city and business community regarding the closure of cross streets.
- Lengthen construction time & cost. (In the original concept the project would have taken 10 years and cost approximately 30% more).
- Potential safety issues with maintaining a single interchange: 1) Freeway would back-up and could lead to accidents from sheer traffic volume and stop and go traffic; and 2) Freeway congestion could lead to accidents from vehicles attempting to cross three lanes of congested traffic to access the right-turn lane.

### **Public Involvement Strategy & Next Steps**

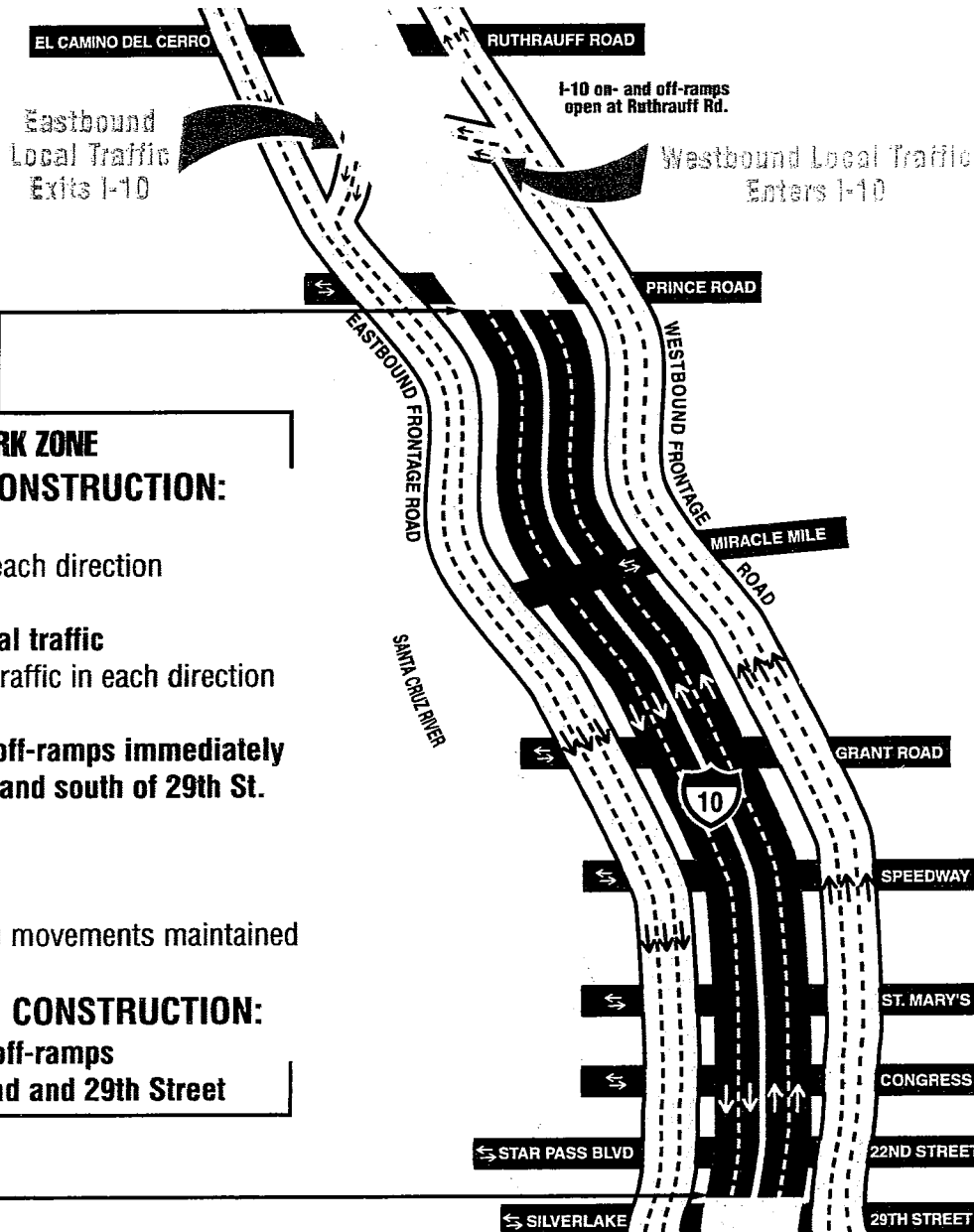
- Implement a strategic, integrated, comprehensive approach to build and maintain consensus with major stakeholders
- Conduct ongoing two-way dialogue to coordinate future efforts with:
  - Southern Arizona Governor's Office beginning with Jan. 31 meeting
  - City Manager's office
  - Emergency Services representatives beginning with Feb. 14 meeting
  - City of Tucson, Rio Nuevo and University of Arizona beginning with meeting Jan. 28
- Continue with the public information process with members of the public, neighborhoods, businesses, local organizations, commuters and other highway users, the media and elected officials.



# Widening I-10 : Prince Road to 29th Street

## Traffic Movement During Construction

Planned for Summer 2006 - Fall 2009



### CONSTRUCTION WORK ZONE

#### OPEN DURING CONSTRUCTION:

I-10 through traffic

2 lanes of traffic in each direction

#### Frontage Roads local traffic

3 lanes of one-way traffic in each direction

I-10 on-ramps and off-ramps immediately north of Prince Rd. and south of 29th St.

2 lanes on and off

#### Crossroads

Through and turning movements maintained

#### CLOSED DURING CONSTRUCTION:

I-10 on-ramps and off-ramps

Between Prince Road and 29th Street

For information contact Paki Rico:  
(520) 327-6077, [paki@gordleydesign.com](mailto:paki@gordleydesign.com)  
Par información, favor de comunicarse  
con Paki Rico al (520) 327-6077.

#### Note:

The term "Local Traffic" refers to all I-10 motorists who need to exit I-10 between Prince Road and 29th Street.





# Widening I -10: Prince Road to 29th Street



## Fact Sheet

### Interstate Frontage Roads

- In 1989, the Arizona Department of Transportation (ADOT) began the design and construction of continuous, one-way frontage roads from Ina Road to 29<sup>th</sup> Street. This frontage road system was developed in order to expand the capacity of Interstate 10 and to provide a detour for traffic during the widening of mainline Interstate 10. The final sections of frontage road are complete and motorists are able to travel between Ina Road and 29<sup>th</sup> Street on a two lane, one-way frontage road system.

### Interstate Improvements

- ADOT's plans to widen I-10 from Prince Road to 29<sup>th</sup> Street include:
  - ▶ Totally reconstructing the freeway from 6 lanes to 8 lanes (4 lanes in each direction).
  - ▶ Building new interstate bridges at Grant Road, Speedway Blvd., St. Mary's Road, Congress St., Granada Avenue/Clark Street, 18<sup>th</sup> Street and 22<sup>nd</sup> Street.

### Traffic Movement during Construction

- The construction of I-10 from Prince Road to 29<sup>th</sup> Street, anticipated to last approximately 40 months, will cause the following changes in traffic movement through the project area.
  - ▶ For local traffic and access, three lanes of one-way traffic will be maintained on each frontage road from Prince Road to 29<sup>th</sup> Street.
  - ▶ All on-ramps and off-ramps between Prince Road and 29<sup>th</sup> Street will be closed for the duration of the construction project. (Approximately 40 months)
  - ▶ Crossroad traffic will be maintained during construction. However, motorists should anticipate occasional weekend and nighttime closures during bridge demolition and construction. Turning movements at crossroads will be maintained.
  - ▶ I-10 traffic that does not need to exit between Prince Road and 29<sup>th</sup> Street will be maintained through the construction zone with two eastbound and two westbound travel lanes on the interstate.

### Schedule – Reduced from 10 years to 3 1/2 years

- The decision to construct six miles of freeway as one project was made in conjunction with the City of Tucson. Constructing this project all at once allows ADOT to keep the cross streets open during the major portion of construction and reduces the construction time from 10 years to 3 1/2 years.
- Construction is planned to start in Summer 2006 and be completed in Fall 2009.

### Design

- The design for the Prince Road to Grant Road section of the freeway is complete.
- The design for the Grant Road to 29<sup>th</sup> Street section of the freeway is currently underway.

#### ADOT – Interstate 10 Project Managers –

St. Mary's Road to 29th Street: LARRY MAUCHER (520) 620-5430

Grant Road to St. Mary's Road: LAUREL PARKER (520) 620-5430

HDR – Design Engineer – ROBERT BRITTAIN (520) 628-3636

For Information contact Paki Rico or Jan Gordley at (520) 327-6077



# **Ampliación de I -10: Prince Road - 29th Street**



## **Hoja de Información**

En 1989, el Departamento de Transporte de Arizona (ADOT) comenzó el diseño y construcción de caminos auxiliares laterales, continuos, de un sentido, desde Ina Road hasta la calle 29. Este sistema de caminos auxiliares laterales fue desarrollado con el fin de extender la vida de la Interestatal 10 y proveer un desvío para el tráfico durante el ensanchamiento de la línea principal de la Interestatal 10. Las secciones finales del camino auxiliar lateral están terminadas y los conductores pueden circular entre Ina Road y la calle 29 por un sistema de caminos auxiliares laterales, en un solo sentido y de dos vías.

- En la primavera del 2006 ADOT comenzará la reconstrucción y ensanchamiento total de I-10 desde Prince Road hasta la calle 29. Este trabajo incluirá:
  - ▶ La reconstrucción total de la carretera a ocho vías (4 vías en cada sentido).
  - ▶ La construcción de puentes nuevos en Grant Road, Speedway Blvd., St Mary's, Congress Street, Granada/Clark Avenue, calle 18 y calle 22.
- La reconstrucción de I-10 desde Prince Road a la calle 29 causará los siguientes cambios en el flujo del tráfico por el área del proyecto:
  - ▶ Se mantendrán tres vías para el tráfico local en las calles auxiliares laterales desde Prince Road hasta la calle 29.
  - ▶ Todas las rampas de entrada y salida entre Prince Road y la calle 29 se cerrarán por todo el periodo de duración del proyecto de reconstrucción. (alrededor de 40 meses)
  - ▶ El tráfico en las calles transversales se mantendrá durante la construcción. Sin embargo, durante la construcción del puente, los conductores deberán anticipar cierres ocasionales los fines de semana y en la noche. Los movimientos de viraje se mantendrán en las intersecciones.
  - ▶ El tráfico de I-10, que no necesite salir entre Prince Road y la calle 29, se mantendrá durante la zona de construcción con dos vías en dirección este y dos en dirección oeste.
- La decisión de construir seis millas de carretera como un solo proyecto fue tomada en conjunto con la ciudad de Tucson. La construcción de este proyecto de una sola vez, le permite a ADOT mantener las intersecciones abiertas durante una gran parte de la etapa de construcción y reducir el tiempo de construcción de 10 años a 3 1/2 años.
- El diseño de la sección desde Prince Road hasta Grant Road de la carretera se ha completado.
- El diseño de la sección de Grant Road a la calle 29 de la carretera actualmente está siendo diseñado.

**ADOT – Gerente del Proyecto de la Interestatal 10 – LARRY MAUCHER**  
**ADOT – Gerente del Proyecto de la Interestatal 10 – LAUREL PARKER**

**HDR ENGINEERING – Ingeniero Diseñador – ROBERT BRITTAIN**  
**Para información, favor de comunicarse con Paki Rico al (520) 327-6077.**